

## CLAIMS

We claim:

1. A method of authenticating an electronic device, the electronic device having device specific identifying data stored therein, the method comprising:
  - obtaining a previously determined challenge response pair associated with the electronic device, the challenge response pair being unique and based upon the device specific identifying data of the electronic device;
  - communicating a challenge portion of the challenge response pair to the electronic device;
  - receiving from the electronic device a response to the challenge portion the response being based upon the device specific identifying information;
  - and
  - comparing the response to a response portion of the challenge response pair to authenticate the user.
2. The method of claim 1, wherein the step of obtaining a challenge response pair comprises obtaining from a database store of challenge response pairs the challenge response pair.
3. The method of claim 1, wherein the step of obtaining a challenge response pair comprises generating and storing a plurality of challenge response pairs.
4. The method of claim 1, wherein the step of obtaining a challenge response pair comprises obtaining a challenge response pair from a challenge response pair broker.
5. The method of claim 1, wherein the device specific identifying data comprises data stored on a subscriber identity module (SIM) card associated with the electronic device, or computed by the SIM card upon demand.

6. The method of claim 1, comprising the step of discarding the challenge response pair after use.
7. The method of claim 1, wherein the step of obtaining a challenge response pair comprises obtaining via a secure communication interface the challenge response pair.
8. A system for device authentication comprising:
  - an agent for interrogating an electronic device to obtain at least one challenge response pair, the challenge response pair being based upon device specific identifying data retained within the electronic device;
  - a memory for storing the challenge response pair; and
  - an agent for providing the challenge response pair from the memory to a user of the challenge response pair for authenticating an electronic device.
9. The system of claim 8, wherein the device specific identifying data comprises subscribed identity module (SIM) card data from a SIM card within the electronic device.
10. The system of claim 9, wherein the user comprises a service provider having a need to authenticate the electronic device.
11. The system of claim 10, wherein the agent for interrogating and the agent for providing are associated with the service provider.
12. The system of claim 8, the challenge response pair comprising a challenge portion and a response portion, and wherein the user is operable to communicate the challenge portion to the device and to receive from the device a response based upon the challenge and the device specific identifying data.
13. The system of claim 8, wherein the agent for providing the challenge response pair comprises a challenge response pair broker.

14. A method of providing an authentication service comprising the steps of:  
obtaining from an electronic device a plurality of challenge response pairs  
the challenge response pairs having a challenge portion and a response  
portion, the response portion being based upon the challenge and device  
specific identifying data associated with the electronic device;  
storing the challenge response pairs; and  
providing responsive to a request for an authentication service a challenge  
response pair to a service provider for authenticating the electronic device.

15. The method of claim 14, wherein the step of obtaining from an electronic  
device a plurality of challenge response pairs comprises generating from a  
subscribed identify module (SIM) card a plurality of challenge response pairs  
and providing the SIM card to a user of the electronic device.

16. The method of claim 14, wherein the step of providing response to a  
request for an authentication service a challenge response pair comprises  
vending the challenge response pair.

17. The method of claim 14, wherein the step of providing response to a  
request for an authentication service a challenge response pair comprises  
securely communicating the challenge response pair to the service provider.